CLAIMS

I claim:

1. A method for carrying energy from one location to another, comprising;

obtaining aluminum metal from a first location;

reacting said aluminum metal with water in a catalytic reaction, thereby splitting said water into hydrogen, oxygen and forming a clean aluminum derivative;

converting said hydrogen into energy at a second location; and

returning said aluminum derivative to an aluminum foundry for conversion thereof to aluminum metal.

2 The method as claimed in **claim 1**, wherein said clean aluminum derivative comprises $Al_2(OH)_3$, $Al(OH)_3$, Al_2O_3 or a mixture thereof.

3. A system for carrying energy from one location to another, comprising,

means at a first location for forming aluminum metal from a first portion of aluminum derivative;

means for reacting aluminum metal with water in a catalytic reaction for splitting water into hydrogen and oxygen and forming a second portion of aluminum derivative;

means for converting said hydrogen into energy at a second location, and

means for transporting said second portion of aluminum derivative to said first location and forming aluminum metal therewith.

4. A method for carrying energy from one location to another, comprising;

using a first energy at a first location, forming aluminum metal from a first portion of aluminum derivative;

reacting said aluminum metal with water in a catalytic reaction, thereby splitting said water into hydrogen, oxygen and forming a second or subsequent portion of aluminum derivative;

converting said hydrogen into a second energy at a second location; and

using said second or subsequent portion aluminum derivative, repeating said steps of forming, reacting and converting.

5. The method as claimed in **claim 4**, wherein said aluminum derivative comprises $Al_2(OH)_3$, $Al(OH)_3$, Al_2O_3 or a mixture thereof.

6. The method as claimed in **claim 4**, wherein said step of converting is carried out in an hydrogen fuel cell.

7. The method as claimed in **claim 4**, wherein said step of converting is carried out in an internal combustion engine.